

Published and Copyright (c) 1999 - 2010
All Rights Reserved

Atari Online News, Etc.
A-ONE Online Magazine
Dana P. Jacobson, Publisher/Managing Editor
Joseph Mirando, Managing Editor
Rob Mahlert, Associate Editor

Atari Online News, Etc. Staff

Dana P. Jacobson -- Editor
Joe Mirando -- "People Are Talking"
Michael Burkley -- "Unabashed Atariophile"
Albert Dayes -- "CC: Classic Chips"
Rob Mahlert -- Web site
Thomas J. Andrews -- "Keeper of the Flame"

With Contributions by:

Fred Horvat

To subscribe to A-ONE, change e-mail addresses, or unsubscribe,
log on to our website at: www.atarineWS.org
and click on "Subscriptions".
OR subscribe to A-ONE by sending a message to: dpj@atarineWS.org
and your address will be added to the distribution list.
To unsubscribe from A-ONE, send the following: Unsubscribe A-ONE
Please make sure that you include the same address that you used to
subscribe from.

To download A-ONE, set your browser bookmarks to one of the
following sites:

<http://people.delphiforums.com/dpj/a-one.htm>
Now available:
<http://www.atarineWS.org>

Visit the Atari Advantage Forum on Delphi!
<http://forums.delphiforums.com/atari/>

=~=-~=-

~ Firefox 4 Nearly Ready ~ Life Without High Speed ~ Beam Me Up, Watson!

-* Computing Future: Chrome OS? *-
-* FCC Poised To Adopt Net Neutrality! *-
-* Divided FCC Adopts Rules To Protect Traffic *-

=~~=~~=

->From the Editor's Keyboard

"Saying it like it is!"

'Twas the night before Christmas... Heck, you know the storyline so I won't belabor the point. But, I will say that because of the holiday, and my work schedule this week, I have had to try and complete this week's issue way ahead of schedule. I'll be working Christmas eve, waiting on customers who have waited until the last minute to pick up deli platters and other deli items for their various celebration activities. Fortunately, the store will close early Friday night, but late enough to cut into my getting work done on this week's issue in a timely fashion. I don't usually work on Friday nights, but this is one of those work nights where they need "responsible" people (and probably those who aren't overly concerned working Christmas eve!).

We're just about ready for the holiday; our shopping has been done for well over a week. For us, that's a miracle in itself! I just have to wrap a few more presents and I'll officially be done for preparation. We're spending the day at my in-laws, as is usual. It will probably be an early day because I'll probably be working on Sunday. That's okay, I'd prefer it that way and have a chance to relax a little bit.

We're closing in on the end of another year of publishing A-ONE. Looking at the masthead above, it's been 12 years that we've been putting the mag out on a weekly basis. Heck, that's longer than Atari was around, or at least as the Atari that we're most fond. Joe and I both knew that putting together an online magazine devoted to all things Atari would be an uphill battle every week. Our hopes, as partially indicated by the name of the mag itself, was to be able to have a little bit of Atari-related news each week (okay, we knew that would be an occasional stretch of the imagination!) and fill in the rest with interesting news that would inform and entertain the general computer user.

Over the years, anything remotely tied-in to the Atari world has diminished to the point of almost non-existent. No one's fault; it's just the way things are. Enthusiasm wanes, interests change, and lifestyles alter. And, of course, technology has grown by leaps and bounds. In the back of my mind, there's always been the thought of where we're headed with the magazine, and for how long. The focus each week, especially over the past few years, has been more the "etcetera" rather than Atari. The support of our readers, as well as the pure enjoyment of doing the magazine has been the primary factors in our longevity.

Yes, I realize that what I've written above sounds more like an epitaph than anything else. And to be quite honest, there has been more than one occasion in which I've considered letting A-ONE fade off into the sunset. That time

hasn't come yet, but it is something that Joe and I will probably consider in the not-so-distant future. Personally, and I think it's safe to speak for Joe in this matter, I'd like to know your views on the subject. I know that there are still some avid readers out there, and that our subscription service still has a good amount of names on it so people are still reading A-ONE. It would be nice to hear from some of you more often than we do, and perhaps offer some interesting tidbits - some interesting memories or other things pertaining to your Atari experience - that we could include in future issues of the magazine. Think about it, would you? Our purpose with A-ONE has always

been one to inform and entertain, but there's only so much that we can do to accomplish that goal each week - or attempt to do so!

Cold, snowy and bleak here this past week, but the sun has finally peaked out today. Of course, I have to go out in a couple of hours to work! More snow, and potentially a bad storm is being forecast for late weekend. Like most New Englanders, I'll believe it when I see it - everything can change in a matter of hours, or less!

Meanwhile, all of us that are involved with A-ONE in some form or another want to wish you the best during this holiday season. We hope that you enjoy your holiday celebrations with family and friends in a joyous occasion. And, as we always do, we remind you to celebrate responsibly - don't drink and drive! Happy holidays!

Until next time...

=~=-~=-

PEOPLE ARE TALKING
compiled by Joe Mirando
joe@atarinews.org

Hidi ho friends and neighbors. Another week has zoomed past, and we're staring down the barrel of Christmas and the end of the year. And it's been a heck of a year in just about every way you might care to look at it. The economy, although not what anyone would call robust, is making a comeback. I know, "where's mine?" is the chant of the day, but the signs are better and better, not the least of which are the projections of spending this holiday season. They've been revised two or three times this season already, each one rosier than the one it's replaced. That is a very good sign, in my opinion.

You see, what a lot of people seem to forget is that there's a "bottom line"... a least common denominator, kind of, that drives everything. All the talk about stimulus packages and bail-outs and tax incentives misses that point.

The point is that people have to BUY things. That's the basis for our entire economy... or, should be.

That's why all this talk about tax incentives for small businesses misses the point. Think about it; what happens if you basically 'leave' more money in the pockets of a small business? Do they hire more employees?

Probably not. It could very possibly allow a struggling small business to survive, but more than likely, it would do little other than to allow 'the boss' to buy an expensive car a month or two earlier. And to add insult to injury, it probably wouldn't even be an American made car. [grin]

The real key, in my opinion, is to give the people who buy things.. you and me... confidence in the dollar he's using to buy whatever it is, confidence that he or she will continue to be able to afford things like whatever it is they're buying... meaning confidence in whether or not they can be assured of a job down the road... and confidence in those around them... the whole rest of the country. You can't instill that sort of confidence with 'tax breaks'. Deep down, we all know tax breaks for what they really are: gimmicks. We all want the things that taxes pay for: roads, protection, schools, all the things that we're lucky enough to be able to take for granted. The catch is that we want someone else to pay for it and we think that no matter what we pay, we're paying too much.

But how do you gauge "too much"? Should we go to "flat rate taxes"? Do we really want to take \$70 a week from someone making \$350 for taxes (leaving them with \$280) because they "should" be paying the same 20 percent as someone making, say \$2,000 a week (meaning they would pay \$400 in taxes, leaving them with \$1,600)? Let's face it. There has to be a... bare minimum somewhere. There's got to be a point where you say "okay, someone making this much needs this much to survive on, so we're going to let them keep it".

You've heard me say this before, but if you let someone of more limited means keep more of their hard-earned money, they're going to spend most of it. Little luxuries like heating oil and food and washing machines and maybe, if they save for a bit, a new car.

Conversely, if you let a 'rich' person keep more of their money, they're not likely to go out and spend any more than they would have without the tax break... that's kind of the definition of being rich... that you can afford to buy what you want when you want to. They're more likely to 'bank' it, maybe invest it, but the bottom line is that it doesn't do much for the economy to help rich people get richer.

And the conservative argument that taxing the rich does nothing but convince them to not earn so much. Can you imagine someone... anyone... saying to themselves, "I'll only earn \$500,000 this year instead of a million. That way I'll pay less taxes." No, I didn't think so.

But whether I'm right or wrong about what I just said up above, it's still true that the economy is driven by buying. If you and I don't buy those shiny new washing machines and swing sets and new mattresses and clothes and all the rest, manufacturers aren't selling them, right? If they're not selling them, they're not making more. If they're not making more, they're not hiring new employees and may well be laying off existing ones. If they're not hiring or if they're laying off, there are not only less of us able to buy things, but those of us who could are less likely to do so because of fear.

So here we are, caught in this vicious Catch-22. Somewhere, something's got to give. And as is usually the case, it's US. We are the ones who start things off. And the holiday season is, I think, the start of a real turn-around. Just wait and see. This buying season is going to be a good one, and people will gain confidence. We'll start buying again, employers will get up to speed, they'll start hiring, things will start moving faster and faster.

Okay, that's my take on things. Let's see how it pans out in the coming year.

I'd like to spend the last part of this column 'preaching' to you a little bit. Yeah, you knew it was coming, didn't you? It's the time of the year, as Charles Dickens put it, "... it is a time, of all others, when Want is keenly felt".

I know I've been pushing at you for the past month or so, but the need is still out there. There are still those who feel 'Want' so keenly. So this weekend when you go shopping, go ahead and pick up a couple of extra cans of veggies or dry pasta or cookies or cooking oil or whatever else you happen to think of. No matter what you get, there'll be someone who would appreciate it... unless it's a tin of smoked oysters... right Charles? (anyone recognize the reference?)

Gather up a couple of things... it doesn't have to be much... and drop it off at your church (or someone else's church), or the local shelter or soup kitchen.

And again, involve your kids in it. Let them go shopping with you and help pick out some of the things for donation. If your kids pick things that they like, surely someone else's kids will appreciate it. Show them that it feels good to do a little something extra. To give something without expecting anything in return. I know a couple of very good kids who are doing just that. I'm incredibly proud of them.

Well, that's about it for this week, folks. Please take care over the holiday. Have fun, but be responsible. Don't drink and drive. Remember: The life you save may be MINE!

C'mon back next week and we'll celebrate the end of the year together. Until then, keep your ears open so you'll hear what they're saying when...

PEOPLE ARE TALKING

=~=-~=-

->In This Week's Gaming Section - Activision Seeks \$400 Million!

=~=-~=-

->A-ONE's Game Console Industry News - The Latest Gaming News!

Activision Seeks \$400 Million for "Call of Duty"

Activision Blizzard Inc is seeking \$400 million damages from Electronic Arts Inc. in a lawsuit related to its "Call of Duty" video game franchise, court filings showed.

In a complaint filed with California Superior Court for Los Angeles County on Tuesday, Activision sought to add Electronic Arts as a defendant in a case against two former executives who developed the "Call of Duty" video game franchise.

In April, Activision countersued former executives Jason West and Vincent Zampella, charging them with attempting to hijack the company's assets and threatening the future of "Call of Duty" franchise.

Activision's counter charge was in response to the duo's lawsuit against the company, which challenged their dismissal and sought \$36 million in royalty payments and damages.

Activision said on Tuesday that West and Zampella broke their long-term exclusive employment agreements to set up their own independent company to develop games for Electronic Arts instead of Activision.

Electronic Arts had signed a publishing and distribution deal with Respawn Entertainment, a new company formed by West and Zampella after their ouster from Activision.

"As a result, Activision has suffered damages measured not in the millions, but hundreds of millions of dollars," Activision said in the filing.

Electronic Arts could not immediately be reached for comment by Reuters outside regular U.S. business hours.

Activision Blizzard is the world's largest stand-alone game publisher and is home to popular games like "Call of Duty" and "World of Warcraft: Cataclysm."

Electronic Arts, which made its name on sports games, publishes famous titles like "FIFA 11" and "Need for Speed."

The case is Jason West v Activision Publishing, Superior Court of the State of California, No. 107041

=~ =~ =~

A-ONE's Headline News
The Latest in Computer Technology News
Compiled by: Dana P. Jacobson

Google Lets You Track Santa Online and Even Leave Him a Voicemail

Google is getting into the Christmas spirit by letting you track Santa on

Google Earth or Maps; watch highlights from the man-in-red's magical journey on YouTube; and even leave him a voicemail on his Google Voice Number.

Google has once again teamed up with the Northern American Aerospace Defense Command (NORAD) to keep an exact fix on the jolly old elf's location in real time. This year, according to Google and NORAD, Santa's 2010 route plan includes more than 200 countries and territories worldwide. You can follow Santa starting at 2 a.m. Eastern Time Friday using the Google Earth Web browser plug-in, Google Maps for mobile or desktop, Twitter, and Facebook. The best part is you can teach your child a little about the world while satisfying their curiosity about Santa's annual journey.

Here's how you to keep tabs on Santa during Christmas Eve 2010.

Google Earth

The easiest way to follow along with Santa is through the Google Earth browser plug-in (not the Google Earth desktop client) for Windows or Mac OS X. For Windows, the plug-in works with Google Chrome, Internet Explorer 6 or higher, Firefox 2.0 or higher, and Flock. Mac users with Intel-based machines (but not PowerPC-based Macs) can use the plug-in with Safari 3.1 or higher, Firefox 3.0 or higher and, unlike last year, Google Chrome for Mac.

Once you install the browser plug-in, visit noradsanta.org and click on Track Santa in Google Earth. You will then be able to watch Santa steering his sleigh right from your Web browser. You can also click on special YouTube videos to see Santa in action at locations around the globe, and clicking on gift icons on will let you learn more about each city. Last year, each gift icon provided images from Google's Panoramio service, as well as Wikipedia entries about each location. It's not clear if Google will offer the same content this year.

Track Santa On Google Maps - Desktop and Mobile

If you don't use the Google Earth plug-in, you can still see Santa's real time location in the standard version of Google Maps. You will also be able to view the YouTube videos and click on the gift icons using Google Maps.

As an added bonus, the Google Maps' Street View Pegman (the little orange man) will also get into the Christmas spirit on Friday by wearing a miniature version of Santa's cap.

If you're family is on the go Friday, you can use Google Maps for Mobile to find Santa's latest location. Just point your mobile Web browser to m.google.com/maps and type "Santa" into the Google Maps search box to see where the jolly old elf is.

If you don't have access to Google Earth on Friday, you can still follow along with Santa via @noradsanta on Twitter, the NORAD Santa Facebook page, or Santa's Picasa Web album. You can also expect regular video updates through Santa's YouTube page.

Santa Calling

As a special treat this year, Google Voice has teamed up with Santa himself to send personalized messages to kids of all ages. Just visit SendACallFromSanta.com and fill out some personal information about the

person you want Santa to send greetings to such as their favorite food and what they want for Christmas.

After you're done, you'll get a chance to hear the personalized message from Santa to your loved one. After that you can forward Santa's personalized message to a U.S. telephone number, e-mail address or Facebook account.

You can also have your child leave Santa a voicemail on his Google Voice number to make sure he knows what's on your kid's Christmas wish list. Just call 1-855-34-SANTA to leave Saint Nick a message.

Santa Gets Government Approval

With billions of children anticipating his arrival in over 200 locations around the world, 2010 is shaping up to be a big year for Santa. But there were early indications that his journey across the United States was going to be impeded this year. The man in red recently upgraded to a next-generation sleigh, dubbed Santa One, that is faster and features improved maneuvering capability when descending into cities and town.

To cross American skies, however, the new aircraft needed approval from the Federal Aviation Authority's safety inspectors. Children around the country breathed a sigh of relief Monday after the FAA announced it had certified Santa's new sleigh for air travel just four days before Christmas Eve. Santa is the only pilot the FAA approves to fly thousands of domestic and international short-haul and long-range flights in one night. You can read the official FAA press release here as well as find more information about Santa One at FAA.gov.

The Santa-NORAD Tradition

Norad's annual tradition of tracking Santa Claus on his Christmas trek around the world began quite by accident in 1955 thanks to a Colorado Springs-based Sears. The department store published a newspaper ad promising kids the chance to call Santa on Christmas Eve. However, instead of Kris Kringle's hotline the ad mistakenly printed the direct number for the Commander-in-Chief of Continental Air Defense Command (CONAD), the predecessor to NORAD. CONAD's hotline was reserved exclusively for calls from the Pentagon and high-level military commanders.

That night, however, calls from children soon started rolling in to CONAD's Colonel Harry Shloup, who was director of operations at the time, looking to talk to Santa. Not wanting to disappoint the children, Shloup had his staff check the radar for any indications that a reindeer-powered sleigh was moving southward from the North Pole. Indeed there were indications that Santa was on his way, and children who called in to CONAD that night were given updates on Santa's location. Thus, the tradition of NORAD tracking Santa Claus was born.

FCC Poised To Adopt Network Neutrality Rules

New rules aimed at prohibiting broadband providers from becoming gatekeepers of Internet traffic now have just enough votes to pass the Federal Communications Commission on Tuesday.

The rules would prohibit phone and cable companies from abusing their control over broadband connections to discriminate against rival content or services, such as Internet phone calls or online video, or play favorites with Web traffic.

FCC Chairman Julius Genachowski now has the three votes needed for approval, despite firm opposition from the two Republicans on the five-member commission. Genachowski's two fellow Democrats said Monday they will vote for the rules, even though they consider them too weak.

The outcome caps a nearly-16-month push by Genachowski to pass "network neutrality" rules and marks a key turning point in a policy dispute that began more than five years ago.

"The open Internet is a crucial American marketplace, and I believe that it is appropriate for the FCC to safeguard it by adopting an order that will establish clear rules to protect consumers' access," Commissioner Mignon Clyburn, a Democrat, said in a statement.

Yet many supporters of network neutrality are disappointed. Clyburn and the other Democrat, Michael Copps, both said the rules are not as strong as they would like, even after Genachowski made some changes to address their concerns.

That sentiment was echoed by some public interest groups on Tuesday.

"The actions by the Federal Communications Commission fall far short of what they could have been," said Gigi Sohn, president of Public Knowledge. "Instead of strong, firm rules providing clear protections, the commission, created a vague and shifting landscape open to interpretation."

A number of big Internet companies, including Netflix Inc., Skype and Amazon.com Inc., have previously expressed reservations about the proposal as well.

Meanwhile, even the weakened rules are likely to face intense scrutiny as soon as the Republicans take over the House next year.

The chairman's proposal builds on an attempt at compromise crafted by outgoing House Commerce Committee Chairman Henry Waxman, D-Calif., as well as a set of broad net neutrality principles first established by the FCC under the previous administration in 2005.

The rules would require broadband providers to let subscribers access all legal online content, applications and services over their wired networks - including online calling services, Internet video and other Web applications that compete with their core businesses.

But the plan would give broadband providers flexibility to manage data on their systems to deal with problems such as network congestion and unwanted traffic like spam as long as they publicly disclose their network management practices.

Senior FCC officials stressed that unreasonable network discrimination would be prohibited.

They also noted that this category would most likely include services that favor traffic from the broadband providers themselves or traffic from business partners that can pay for priority. That language was

added to help ease the concerns of Genachowski's two fellow Democrats.

The proposal would, however, leave the door open for broadband providers to experiment with routing traffic from specialized services such as smart grids and home security systems over dedicated networks as long as these services are separate from the public Internet.

Public interest groups fear that exception could lead to a two-tiered Internet with a fast lane for companies that can pay for priority and a slow lane for everyone else.

They are also worried that the proposal lacks strong protections for wireless networks as more Americans go online using mobile devices.

The plan would prohibit wireless carriers from blocking access to any websites or competing applications such as Internet calling services on mobile devices. It would require them to disclose their network management practices too.

But wireless companies would get more flexibility to manage data traffic as wireless systems have more bandwidth constraints than wired networks.

"Individuals who depend on wireless connections to the Internet can take no comfort in this half-measure," said Joel Kelsey, political advisor for the public interest group Free Press.

Republicans, meanwhile, warn that the new rules would impose unnecessary regulations on an industry that is one of the few bright spots in the current economy, with phone and cable companies spending billions to upgrade their networks for broadband.

Burdensome net neutrality rules, they warn, would discourage broadband providers from continuing those upgrades by making it difficult for them to earn a healthy return on their investments.

Still, Genachowski's proposal is likely to win the support of the big phone and cable companies because it leaves in place the FCC's current regulatory framework for broadband, which treats broadband as a lightly regulated "information service."

The agency had tried to come up with a new framework after a federal appeals court in April ruled that the FCC had overstepped its existing authority in sanctioning Comcast Corp. for discriminating against online file-sharing traffic on its network - violating the very net neutrality principles that underpin the new rules. Comcast argued that the service, which was used to trade movies and other big files over the Internet, was clogging its network.

To ensure that the commission would be on solid legal ground in adopting net neutrality rules and other broadband regulations following that decision, Genachowski had proposed redefining broadband as a telecommunications service subject to "common carrier" obligations to treat all traffic equally. But Genachowski backed down after strong opposition from the phone and cable companies, as well as many Republicans in Congress.

Federal regulators adopted new rules Tuesday to keep the companies that control the Internet's pipelines from restricting what their customers do online or blocking competing services, including online calling applications and Web video.

The vote by the Federal Communications Commission was 3-2 and quickly came under attack from the commission's two Republicans, who said the rules would discourage investments in broadband. Prominent Republicans in Congress vowed to work to overturn them.

Meanwhile, critics at the other end of the political spectrum were disappointed that the new regulations don't do enough to safeguard the fastest-growing way that people access the Internet today - through wireless devices like smart phones and tablets.

The new rules have the backing of the White House and capped a year of efforts by FCC Chairman Julius Genachowski to find a compromise. They are intended to ensure that broadband providers cannot use their control of the Internet's on-ramps to dictate where their subscribers can go.

They will prohibit phone and cable companies from favoring or discriminating against Internet content and services that travel over their networks - including online calling services such as Skype, Internet video services such as Netflix and other applications that compete with their core businesses.

The prohibitions, known as "net neutrality," have been at the center of a Washington policy dispute for at least five years. The issue hit home with many Internet users in 2007, when Comcast Corp. slowed traffic from an Internet file-sharing service called BitTorrent. The cable giant argued that the service, which was used to trade movies and other big files over the Internet, was clogging its network.

The new FCC rules are intended to prevent that type of behavior.

They require broadband providers to let subscribers access all legal online content, applications and services over their wired networks. They do give providers flexibility to manage data on their systems to deal with network congestion and unwanted traffic, including spam, as long as they publicly disclose how they manage the network.

"Today, for the first time, we are adopting rules to preserve basic Internet values," Genachowski said. "For the first time, we'll have enforceable rules of the road to preserve Internet freedom and openness."

On one level, the new rules probably won't mean big changes for Internet users. After Comcast's actions cast a spotlight on the issue - and drew a rebuke from the FCC - all of the major broadband providers have already pledged not to discriminate against Internet traffic on their wired networks.

Even Genachowski acknowledged Tuesday that a key goal of the new rules is to preserve the open Internet as it exists today.

Still, critics say the rules don't do enough to break the existing lock-hold that wireless carriers have over the online applications that subscribers can access through their systems.

The regulations prohibit wireless carriers from blocking access to any

websites or competing services such as Internet calling applications on mobile devices, and they require carriers to disclose their network management practices, too. But wireless companies get more leeway to manage data traffic because wireless systems have less network bandwidth and can become overwhelmed with traffic more easily than wired lines.

That means that while wireless carriers must allow access to Internet calling services such as Skype, they could potentially still block online video applications, such as Sling.

The rules also wouldn't apply to phone makers, so Apple could still dictate which applications to accept or reject for the iPhone. Apple could choose to block Skype, for instance, even if AT&T, which provides wireless service for the iPhone, can't.

At a time when more and more people go online using smart phones and other mobile devices instead of computers, the rules leave wireless carriers with tremendous control over tomorrow's Internet, said Gigi Sohn, president of the public interest group Public Knowledge.

At the same time, Sen. Al Franken, D-Minn., fears the rules don't do enough to ensure that broadband providers cannot favor their own traffic or the traffic of business partners that can pay extra. Big websites such as Google Inc., for instance, could pay to have their content download more quickly than mom-and-pop sites - leading to what critics term a two-tiered Internet.

While the new rules prohibit unreasonable network discrimination - a category that FCC officials say would most likely include such "paid prioritization" - they do not explicitly bar the practice. What's more, they leave the door open for broadband providers to experiment with routing traffic from specialized services, such as home security systems, over dedicated networks as long as they're kept separate from the public Internet.

These concerns resonated with Genachowski's two Democratic colleagues at the FCC, who voted to approve the rules only reluctantly.

"Today's action could - and should - have gone further," said Michael Copps, one of the other two Democrats on the commission. But, he added, the regulations do represent some progress "to put consumers - not Big Phone or Big Cable - in control of their online experiences."

Republicans, meanwhile, said they worry the rules will discourage phone and cable companies from upgrading their networks because it will be more difficult for them to earn a healthy return on their investments. Republicans also said the regulations seek to fix a problem that doesn't exist because broadband providers have already pledged not to discriminate.

"The Internet will be no more open tomorrow than it is today," said Meredith Attwell Baker, one of the two FCC Republicans, in voting against the rules.

A number of prominent Republicans - including Kay Bailey Hutchison of Texas, the top Republican on the Senate Commerce Committee, and Fred Upton of Michigan, the incoming chairman of the House Commerce Committee - vowed to try to overturn the rules.

Robert McDowell, the FCC's other Republican, predicted that the FCC will

face court challenges to its regulatory authority as well.

In April, a federal appeals court ruled that the agency had exceeded its existing authority in sanctioning Comcast for discriminating against online file-sharing traffic on its network - violating broad net neutrality principles first established by the FCC in 2005.

Those principles serve as a foundation for the formal rules adopted Tuesday.

Chrome OS Gives A Peek at Computing Future

What if nearly everything you usually keep on your computer - photos, documents, music and software - was stored online? Your machine would be speedier and perhaps less vital because you could simply use another machine to recoup your digital life should you lose your laptop.

This premise - somewhat scary, yet liberating - is behind Google Inc.'s upcoming Chrome OS, which will make notebook computers more like netbooks than most actual netbooks.

The software powering Chrome OS, which is based on the search giant's eponymously named browser, serves mainly as a tool for connecting your computer to the Web. That's where nearly everything you use is housed and linked to your Google username and password. It's a concept known as cloud computing.

A peek at the upcoming operating system and its vision of cloud computing shows a promising idea that could make computing faster and more convenient. But it still needs a lot of work.

Google expects the first computers powered by Chrome OS to be released this summer, and initially they'll be made by Acer Inc. and Samsung Electronics Co.

For now, though, Google is operating a pilot for some individuals and companies to test an unbranded laptop that runs Chrome OS. The company lent The Associated Press one of these machines, which aren't going to be sold to the public.

The laptop itself, called the Cr-48, doesn't really deserve to be critiqued, because it is a stripped-down machine that is chiefly a frame for Google's OS oeuvre. The shell is entirely matte black plastic, without a hint of branding. It has a webcam, a screen that is about 12 inches diagonally and a full-sized keyboard with a search key in place of the caps lock key.

The machine also has 16 gigabytes of flash memory for storing files, if you feel absolutely compelled to download something. Downloads are obviously discouraged, though; my music collection alone would nearly fill this allotment.

Moving on to the main event, Chrome OS brings a few clear benefits: Starting up the notebook takes just seconds - roughly 13 of them, according to my stopwatch - and waking the closed notebook from "sleep" mode is as quick as opening it up (almost too quick, as the notebook couldn't regain its wireless service quite as fast). By contrast, my

Windows machine at work takes more than two minutes to boot up.

After you sign in with your Google account, the same username and password you would use to access Gmail, you can pull up a home page showing all the apps you've installed from the Chrome Web Store.

Assuming you're connected to the Web, you can just start using apps and surfing the Web right away.

There were plenty of free and paid Web apps and browser extensions available when I tested the notebook. Some are only for the Chrome OS; others also work with Google's Chrome Web browser for other computers.

I installed a range of the free ones, some of which seemed to be just links to existing Web pages. The apps I snagged included Web-based office suite Google Docs, the chatting service Google Talk, Aviary's Advanced Image Editor and balloon-popping puzzle game Poppit.

As with smart phones and tablets such as Apple Inc.'s iPad, publications are also making Chrome apps. USA Today, The New York Times and The Wall Street Journal are among them.

On my work computer, it can take ages to open up applications that are stored on my hard drive. With the Cr-48, I could immediately start editing a Google Docs spreadsheet or tweak the colors in a photo using Aviary because the programs are all running online. I only needed a strong Internet connection.

Surfing the Web was a pretty normal experience, with most websites loading speedily, though the Cr-48 was not that good at displaying Flash videos.

But I felt constrained because I had to use the lone browser that comes with the system and the Web-based apps I obtained. Apps loaded slowly when my Internet connection wasn't stellar. This wouldn't be a problem with programs stored on a regular computer's hard drive.

If a Chrome OS-based laptop becomes my primary computer, a data plan would be a must.

I feel anxious just thinking about the possibility that I couldn't access my documents at any time, and I don't even keep anything that important on my own laptop.

I mostly used the notebook with Wi-Fi at home and at the office, though I also tried out its 3G network service, which is provided by Verizon Wireless.

So what happens if you don't have any Internet access? The Cr-48 is pretty useless.

I could still write in an already-open Google Docs document, add notes in Scratchpad and look at photos I'd downloaded. But I couldn't use apps that are not yet opened because they're all connected to the Web.

If you lose your connection while using an app, you may be able to view some information that has been temporarily stored in memory, as I could when browsing The New York Times' app. But you'll need to get online as soon as possible to really use the machine. Faced with this situation, I'd probably just search frantically for an Internet connection or simply put away my laptop.

In its current state, the Chrome OS is far from ready to take over as my main computer, even if I were using it on a more powerful machine than the Cr-48.

Sure, I spend most of my time on the Web already, but I'm not quite ready to rely on having Internet access to do almost anything with my computer.

I can imagine getting comfortable with that in the not-so-distant future, though, and I'm curious to see if Google can make it happen.

Firefox 4 Nearly Fully Baked

For Mozilla's next browser version, let's hope eight is enough. The independent software foundation has just released Beta 8 of the heavily overhauled new version of Firefox. Firefox 4 sports a trimmed-down user interface (as has been the trend started with Google Chrome and followed by Opera and IE9 beta). The browser also makes some significant internal changes, with a new add-in system, a faster JavaScript engine, and lots more HTML5 compatibility.

To all this goodness, Beta 8 adds a simplified syncing setup, support for WebGL 3D graphics, and a redesigned Add-ons manager. Firefox director Mike Beltzner announced the beta release on a Mozilla Blog post yesterday.

Firefox's syncing allows users to automatically recreate their history, bookmarks, open tab sets, and passwords on other computers and smartphones. The new process automatically generates a short key that you enter when you want to add devices to your syncing account, similar to a lot of device's Bluetooth pairing setup.

WebGL is an open 3D graphics API related to the Khronos Group's similar OpenGL. It allows developers to create rich interactive visual environments inside a browser without the need for plug-ins like Adobe Flash, using the HTML5 Canvas element. Beltzner's blog post states that the beta's WebGL implementation supports "most modern built-in graphics cards."

On the add-in front, Firefox 4 Beta 8's Add-ons manager allows extensions and other add-ons to update themselves automatically, without that bothersome dialog when you start the browser up. The new design also makes it easier to find add-ons of interest, according to Mozilla's Jennifer Boriss. "The new Add-ons manager will be easier to use, sleeker, and faster than ever before," claims Boriss in a separate blog post. Taking a page from Google Chrome's playbook, the new add-on gallery appears in a browser tab page rather than a separate dialog window.

In the JavaScript benchmark wars, this version brings Firefox closer to the competition, but in quick-and-dirty runs of the Sunspider benchmark, Internet Explorer 9 Platform Preview 7, Google Chrome 8, and Opera still beat it handily. On my 3.16GHz dual-core machine, the scores were Firefox 4b8: 254ms, IE9PP7: 203ms, Chrome 8: 216ms, and Opera 11: 229ms.

To try out the Firefox 4 beta for yourself, head to its Mozilla beta download page. You can run it alongside the stable version of Firefox, so don't worry about disturbing your current browser setup. Also look for a full review on PCMag.com of Firefox 4 after its full release early

next year.

Firefox Backs 'Do Not Track' with Online Stealth

As concern about online privacy grows, Mozilla is promising to let people cloak Internet activity in free Firefox Web browsing software being released early next year.

"Technology that supports something like a 'Do Not Track' button is needed and we will deliver in the first part of next year," Mozilla chief executive Gary Kovacs said while providing a glimpse at Firefox 4 at the Mozilla's headquarters in Mountain View, California.

"The user needs to be in control," he added.

There is a disturbing imbalance between what websites need to know about visitors to personalize advertisements or services and the amount of data collected, according to Kovacs.

"It is not that ads are bad," he said. "It is what they do with my tracked behavior.

"Where I go on the Internet is how I live my life; that is a lot of data to hold just for someone to serve me ads."

Microsoft this month unveiled increased privacy options for the upcoming version of its popular Web browser Internet Explorer 9 (IE9) including a feature "to help keep third-party websites from tracking your Web behavior."

Microsoft said "Tracking Protection" will be built into a test version of IE9 being released early next year.

IE9 users will have to be savvy enough to activate the feature and create lists of the third-party websites that they do not want to track their behavior.

Internet Explorer is the most widely used Web browser in the United States followed by Mozilla's Firefox, Google's Chrome and Apple's Safari.

Google, which beefed up Chrome in recent weeks and is testing a notebook computer that operates on the Web browser software, cautioned that the mechanics and ramifications of stealth browsing need to be figured out.

"The idea of 'Do Not Track' is interesting, but there doesn't seem to be consensus on what 'tracking' really means, nor how new proposals could be implemented in a way that respects people's current privacy controls," said the company, also based in Mountain View.

"We look forward to ongoing dialogue about what 'Do Not Track' could look like, and in the meantime we are always looking into new tools to give people more transparency and control over their online privacy."

Kovacs agreed that the issue is complicated, with vested interests that include advertisers paying for services or content offered free online.

Supporters of targeted online ads argue that Internet users benefit from

getting pitches tailored to their interests.

Firefox believes perils to privacy online are urgent enough to warrant building stealth into the coming version of its browser software, which has 400 million users around the world.

"I fundamentally believe that the balance is tipped too far," Kovacs said of tracking Web users.

"You can't tell me the delivery of a piece of content is going to be that much better if you know everything about my life; it's all about moderation."

Firefox debuted in 2004 as an innovative, communally crafted open-source browser released as an option to Internet Explorer.

Mozilla touts itself as the people's alternative; only now the battlefield includes Google as both a supporter and a rival.

"Google is a great partner; it is one of those things where we cooperate and compete," Kovacs said. "When we get together we are either hugging or hitting, it depends on the day."

Mozilla doesn't believe that Chrome is truly an open browser despite being free nor is it convinced that the colossus will sacrifice its business interests when it comes to money to be made off user data.

"We believe that (Chrome) is tied to their commercial purposes," Kovacs said.

"As the Web grows in importance in our lives, having all that data sit with one vendor that is not truly cross platform and not truly cross device is an alarming thing."

A US Federal Trade Commission staff report released this month proposes safeguards including "Do Not Track" features in browsers for people who want their online activities unrecorded by websites they visit.

The report said industry efforts to address privacy through self-regulation "have been too slow, and up to now have failed to provide adequate and meaningful protection."

"The report confirms that many companies - both online and offline - don't do enough to protect consumer privacy," said Democratic Senator John Kerry.

The Grinch Who Stole Porn for Christmas: UK Weighs Ban

Is the UK banning pornography? That is the question overseas at the moment as a conservative member of the British Parliament has proposed forcing ISPs to block all pornographic material seeping into UK homes.

"This is a very serious matter. I think it is very important that it's the ISPs that come up with solutions to protect children. I'm hoping they will get their acts together so that we don't have to legislate, but we are keeping an eye on the situation and we will have a new communications bill in the next couple of years." Culture Minister Ed

Vaizey told the Sunday Times.

Vaizey hasn't turned this into a crusade against all access to pornography; rather, he wants the explicit content accessible only on an opt-in basis instead of opt-out. Vaizey is planning to talk with UK ISPs BT, Virgin Media and TalkTalk "in the near future."

The media is skeptical about whether this plan, if put into action, would work at all. The Guardian says that "explicit content" would have to be legally defined - a process that has been undertaken by many governments and met with failure. Take Schwarzenegger v. Entertainment Merchants Association, for instance. A California law tries to ban retailers from selling video games that depict "deviant violence" to minors. However, the definition of "deviant" is being challenged and three lower courts have ruled against this application; the U.S. Supreme Court is deliberating.

Other problems with a sweeping blockade: it may constitute censorship; the UK's public sector has a reputation of mismanaging IT projects; the massive firewall would be hugely expensive; no matter how big the firewall, someone will find a way to leap it; and an opt-in list would have to be created, and that kind of sensitive data has a tendency to leak: the personal data of thousands of citizens were exposed to the public by a P2P piracy law firm in the UK.

Never mind that Trefor Davies, chief technology officer at ISP Timico, told the BBC that "It's technically not possible to completely block this stuff." Davies said that "the sheer volume of pornographic material online and the number of ways that people access it, via the web, file-sharing networks, news groups, discussion boards and the like," make the job impossible.

Does the UK really have that big a problem with porno? The conservative government and a few studies seem to think so.

Conservative MP Claire Perry said that 60 percent of 9- to 19-year-olds had found porn online but only 15 per cent of computer literate parents knew how to block access with filters. A Cyber Sentinel study found that UK teenagers spend around two hours a week watching porn online, and another study claimed that more than one in three UK office workers surf for porn at work.

That's a lot of porn - but is creating a colossal filter the right answer?

Top UK Judge: No Ban on Twitter in Court

It's the tweet smell of success for courtroom microbloggers in Britain.

The head of the judiciary in England and Wales ruled Monday that there is no ban on using Twitter in court.

Lord Chief Justice Igor Judge said the use of "unobtrusive, hand held, virtually silent" equipment to give live text updates was unlikely to interfere with the administration of justice.

Among the traditions of British justice - alongside lawyers' black robes and horsehair wigs - are strict restrictions on communications. Cameras and recording equipment are banned, phones are usually prohibited, and

even court artists are barred from sketching in the courtroom - they must make notes and then go outside to draw.

Twitter has been a gray area. Last week a judge allowed journalists to tweet from a bail hearing for WikiLeaks founder Julian Assange - the first time it had been expressly permitted. But two days later the judge at another hearing for Assange said tweeting was barred.

The chief justice said there was no legal prohibition on using "a mobile phone, small laptop or similar piece of equipment, solely in order to make live text-based communications of the proceedings" - giving journalists a green light to tweet, text or liveblog from hearings.

But he said users would have to seek the judge's permission first, and this could be refused in criminal trials if there was a risk that information posted on Twitter might influence witnesses or jurors.

Judge said final rules would be issued after a consultation process.

Fast-changing technology is challenging judicial custom around the world.

U.S. federal courts tell jurors to avoid Twitter, Facebook and other social networking sites, but deciding whether journalists can tweet or blog from court has generally been left up to judges. Relatively few federal courts have embraced Twitter, although last year a federal judge in Kansas allowed a reporter to use the microblogging service to provide updates from a gang trial.

Man Used Neighbor's Wi-Fi to Threaten Vice President Biden

A Blaine, Minnesota, man has pleaded guilty to charges that he hacked into his neighbor's Wi-Fi connection to e-mail death threats and child pornography, apparently with the intention of causing trouble for the unsuspecting neighbor.

Barry Vincent Ardolf, 45, pleaded guilty last week to charges of hacking, identity theft, possession of child pornography and making threats to U.S. Vice President Joe Biden. According to prosecutors, he used the Aircrack Wi-Fi cracking software to gain access to his neighbor's WEP-encrypted network. He then created Yahoo and MySpace accounts in his victim's name and launched a campaign to embarrass and cause legal troubles for the neighbor.

He used the Yahoo account to mail child pornography to his neighbor's co-workers, writing "Check it out. New family pic," in one Feb. 22 e-mail. Several such e-mails were sent to co-workers at the large Minneapolis law firm where the neighbor worked, according to court filings.

Ardolf also posted child pornography to the fake MySpace page. "I bet my co-worker that since I'm a lawyer and a darn great one that I could get away with putting up porn on my site here," he wrote on the page. "I bet that all I have to do is say there is plausible deniability since anybody could have put this up on my site."

Ardolf had been upset with the lawyer since 2008, when he filed a police report against Ardolf saying he allegedly "inappropriately touched and kissed the next-door neighbor's toddler on the mouth," court records state.

Again using the hacked wireless connection and a fake e-mail address, Ardolf also sent out death threats to Biden, Minnesota Governor Tim Pawlenty and an unnamed Minnesota Senator. "You guys better start watching your back," he wrote in the May 6 e-mail. "I'm coming for you all. I swear to God I'm going to kill you."

After the pornographic e-mails were sent, the law firm hired a security consultant, who put a packet-capture device on the lawyer's network and found evidence that Ardolf was logging in, according to court filings.

Both the WEP (Wired Equivalent Privacy) and older WPA (Wi-Fi Protected Access) systems suffer from known cryptographic weaknesses. By sniffing network traffic, tools such as Aircrack can quickly figure out passwords on WEP networks. They can also break encryption on WPA-PSK networks that use simple passwords. Security experts recommend that home users go with the newer WPA-2 encryption, but this can be tricky, because it isn't supported on older routers and wireless cards.

In interviews with law enforcement, Ardolf claimed to not know the difference between WEP and WPA. But he owned a copy of Aircrack and had hacking books in his house and an "ethical hacker" bumper sticker on his bathroom mirror, according to investigators.

Ardolf pleaded guilty on Friday - two days into his trial - in U.S. District Court for the District of Minnesota. He faces 40 years in prison on the charges. A sentencing date has not been set. Ardolf's lawyer could not immediately be reached for comment.

People Can't Live Without High-speed Internet

High-speed Internet has had the greatest technological impact on society over the past decade and is the technology most people say they cannot live without, according to a new poll.

Twenty four percent of 1,950 U.S. adults questioned in the online survey conducted by Zogby International said high-speed Internet had the greatest impact on their lives, followed closely by Facebook at 22 percent and Google with 10 percent.

Of the technologies people say they cannot live without, high-speed Internet came in first at 28 percent and email was second at 18 percent.

When asked what they thought would be the greatest technological advancement in the next year, 24 percent said it would be in home entertainment and 16 percent said it would be in general computing.

Looking ahead to the next decade, 43 percent of those surveyed predicted there would be regular use of stem cells and cloning techniques to create human organs for transplant.

Forty percent said computer chips would be implanted in people to monitor their health, and the same number said robots would be capable of performing manual labor jobs.

Rare Apple Lisa 1 Goes Up for Auction

One of Apple's earliest computers, the Lisa 1, has appeared for auction on eBay. A single \$7,500 bid has been made so far; the model in question is said to be functional and largely intact, for instance including original floppy drives and ROMs as well as a keyboard. Absent from the auction are a mouse, battery and the Lisa system software.

Also missing is a serial number, which along with the claimed origins of the computer suggests that it could be an internal model. Development of the Lisa 1 began in 1978, culminating with a launch in January 1983. Steve Jobs is said to have been involved in the project until 1982, when he was pushed out and ultimately joined work on the first Macintosh.

Although the Macintosh became far more popular after its launch in 1984, the business-oriented Lisa 1 is noted to have been more technically advanced in some respects. It supported up to 2MB of RAM, and introduced early forms of multitasking and protected memory. The system cost nearly \$10,000 at the time, but represented the first commercially-available PC with a graphical user interface.

Beam Me Up, Watson

The battle of the decade is about to unfold between man and machine this February as IBM's POWER7-based Watson supercomputer goes head-to-head against game show Jeopardy!'s top-earning contestants Ken Jennings and Brad Rutter.

The three-day contest, which will begin airing February 14 (Valentine's Day), has been four years in the making. IBM engineers are confident about the prototype computer named Watson (after IBM founder Thomas J. Watson) handling linguistic challenges to understand natural language questions. However, experts predict the contest between Jennings, Rutter, and Watson may be close. Jennings won 74 games in 2004, 2005, setting the record for the most games played consecutively. Rutter won \$3.26 million, the highest total ever won by a single player.

Computers using artificial intelligence have traditionally had trouble differentiating between the meanings of words because meanings depend so much on context. As IBM researcher Dave Ferrucci said recently during an interview with /Bloomberg News/, "You could use 'bad' to mean 'bad,' you could use 'bad' meaning 'good,' you could mean 'bad' to mean 'cool,' but there's an intended meaning," he said. "Language is ambiguous, it's contextual, it's tacit," Ferrucci said. The computer already has shown in earlier tests that it is far from infallible. The technology needed to handle the /Jeopardy!/ challenge was developed by a team of 20 IBM scientists, including software engineers and computational linguists. During the course of the development project, Watson reportedly was asked to name the Eighth Wonder of the world. Its answer, in which it indicated it was highly confident, was King Kong! The movie ape's name emerged from a description of the film fed into Watson's database, but the machine was unable to deduce that King Kong was fictional.

There may be more at stake in the Jeopardy! Face-off than one would at first surmise. Think of Sputnik and the aftermath when the U.S. put a man on the moon. The world was in awe of American technology. A win for

Watson could do wonders for IBM and American know-how at a time when the latter sorely needs a boost in the eyes of the world.

However, even if Watson loses, the computer probably won't be annihilated. If it presents a respectable showing against Jennings and Rutter, it will have more or less proved the point that artificial intelligence is reaching a level where computers can understand questions from humans and respond appropriately. And if Watson wins; well, IBM's stock price could go up the next morning. Many of us remember the 1970s when the original Star Trek aired and the idea of a crew member talking to a computer and receiving an intelligent answer; not to mention a selected drink; was amusing but rather far-fetched. Well, it seems those of us alive today may have the privilege of living in the era of Star Trek after all. For a small boy dreaming of space flight, it's almost like his adult astronaut's dreams are now coming true aboard the space shuttle. One can't help but think of the first flights of unmanned and manned spacecraft as we consider computers achieving the ability to understand and respond in human languages. For the record, Watson speaks only English today, but translations are in the works.

The three-day Jeopardy! contest will be hosted by Alex Trebek and comprised of the usual three contestants, including Watson. It will be broadcast from IBM's laboratory in Yorktown Heights, New York, and will air during the regular Jeopardy! time slot. In a slight concession to Watson, the questions will be typed in as well as spoken. If Watson is confident enough in its answer, it will sound the buzzer to offer its solution publicly.

Winner of the contest will receive \$1 million, and if Watson prevails, IBM will donate the money to charity. If either Jennings or Rutter wins, each has agreed to donate half their winnings to charity.

Though IBM may give away a million dollars, make no mistake about the company's plans to commercialize the computer's capabilities and leverage any publicity it receives from the contest. The Watson computer already has started to generate interest from businesses, particularly in the areas of customer support and healthcare, according to the company. IBM is building prototypes for specific applications, including healthcare, but it's expected to be at least three years before the solution is ready for prime time.

Make no mistake that the Jeopardy! show will capture the imagination of people around the world. The difference between having to type in keywords versus speaking them in natural language will be profound. Imagine talking to your iPad and having it talk back to you with new information that you can actually use. People are getting a taste of this already in their satellite-driven GPS navigators. But if you think typing keywords into Google has changed your life, you haven't seen anything compared to being able to easily converse with a computer orally. Natural-language artificial intelligence will take us to whole new planet. Forget about ever getting a human again on a customer service call!

One advance that has made the Watson computer possible is the POWER7 processor. It will be a POWER7 server that goes up against Jeopardy! experts Jennings and Rutter. The POWER7 has taken IBM processing technology to new heights. And Ferrucci and his team believe they are on the threshold of taking IBM artificial intelligence to a new launch point as well. The team very well may go down in history along with the

Deep Blue supercomputer, which in 1997 defeated world chess grandmaster Garry Kasparov. It will be 14 years since that momentous day when yet another powerful IBM computer faces off against the best we humans have to offer.

The match also will bring to light the accomplishments of IBM in a number of fields that are the result of a huge investment the company has made in research and development. Later this month, IBM CEO Sam Palmisano and 15 senior vice presidents will gather in Armonk, New York, to brainstorm next year's technology trends. The top-level team will outline the company's strategy for 2011 at the company's annual Global Technology Outlook meeting to decide which projects get funded and which companies IBM will seek to purchase next year.

In addition to 15 acquisitions in 2010, IBM invested 6.1 percent of revenue, or \$5.8 billion, in research and development. That percentage is likely to stay about the same for 2011 since it has been relatively constant for the past eight years, growing in terms of dollars as revenues increase. Between now and 2015, the company also intends to spend about \$20 billion on additional acquisitions.

In contrast, HP spent about \$3 billion or 2.4 percent of revenue on R&D last year, but that is about to change. HP's new CEO Leo Apotheker has announced plans to increase R&D over what his predecessor spent.

Meanwhile, IBM, it would seem, is gearing up to be "acquisition ready" and appears to be building up its war chest. It just sold \$1 billion in 18-month floating-rate notes this month after raising an additional \$1 billion through the sale of five-year notes earlier in December. That can be added to the \$11 billion in ammunition the company had on hand as of the end of the third quarter in the form of cash and short-term investments.

While spending money can be bad, buying profitable companies can be good. Palmisano has announced that he wants IBM to double its per-share operating earnings over the next few years; thus the investments in analytics, cloud computing, storage, and other technologies.

Next year promises to be an exciting one in the technology arena, and IBM clearly intends to remain on the leading edge of enterprise computing for the foreseeable future. The fact that HP and Oracle are also making great strides will give users an opportunity to exercise choice in the marketplace when considering solutions and should have the effect of keeping the leading technology providers on their toes; and possibly in front of television audiences as well. In which reality show do we expect HP, Oracle, and Dell to appear? Tune in next year for a possible sequel to Jeopardy!

=~~~=

Atari Online News, Etc. is a weekly publication covering the entire Atari community. Reprint permission is granted, unless otherwise noted at the beginning of any article, to Atari user groups and not for profit publications only under the following terms: articles must remain unedited and include the issue number and author at the top of

each article reprinted. Other reprints granted upon approval of request. Send requests to: dpj@atarinews.org

No issue of Atari Online News, Etc. may be included on any commercial media, nor uploaded or transmitted to any commercial online service or internet site, in whole or in part, by any agent or means, without the expressed consent or permission from the Publisher or Editor of Atari Online News, Etc.

Opinions presented herein are those of the individual authors and do not necessarily reflect those of the staff, or of the publishers. All material herein is believed to be accurate at the time of publishing.